

### **REMARKS**

The undersigned attorney wishes to thank the Examiner for the courtesies extended during the Interview. During the Interview, the Examiner recommended amendments which mirror changes made to the parent application (U.S. Application Serial No. 09/044,718, filed March 19, 1998, now U.S. Patent No. 6,391,605) during prosecution. As the Examiner agreed during the Interview, the amendments presented above place the application in condition for allowance.

Should the proposed corrections to the drawings be acceptable, it is requested that the current drawing Figure 11b be replaced with the replacement drawing Figure 11b attached to the Transmittal of Proposed Drawing Corrections concurrently filed herewith, and that current drawing Figure 11c be cancelled. The proposed drawing corrections mirror amendments made to the parent application during prosecution and are intended to more fully reflect the description of Figure 11b set forth in the Brief Description of the Figures section of the specification. Accordingly, support for the proposed drawing corrections is found in the specification at, for example, page 5, lines 19-28.

Claim 16 has been amended to incorporate the limitations of claim 17 (and consequently the limitations of claims 12 and 13 from which claim 17 depends) and to recite that the amino acid of the claimed phytase corresponding to amino acid 27 of the *Aspergillus niger* phytase is identified by the "PILEUP" amino acid sequence alignment program. Support for this amendment is found in original claims 12, 13 and 17 and the specification at, for example, page 22, lines 9-13. See, *In re Gardner*, 177 USPQ 396, 397 (CCPA 1973) and MPEP §§ 608.01(o) and (I).

Claim 16 has further been amended to recite that Glycine (Gly) may be a substituted amino acid. Support for this amendment is found in the specification at, for example, page 7, line 15 and page 33, Table 3.

Claim 17 has been cancelled, without prejudice.

Claim 18 has been amended to incorporate the limitations of claim 14 from which it depends. Support for this amendment is found in original claims 14 and 18. *Id.*


Claim 19 has been amended to incorporate the limitations of claim 15, from which it depends, and further to recite that "the respective amino acid position of each mutation corresponds to the amino acid position of an *Aspergillus niger* phytase as identified by PILEUP version 8 amino acid alignment program." Support for this amendment is found in original claims 15 and 19, and in the specification at, for example, page 2, lines 2-5; page 12, lines 29-31; page 13, lines 5-6 and 9-14; and page 22, lines 9-13. *Id.*

Claims 16, 18 and 19 have further been amended to indicate that the modified phytase is an *Aspergillus fumigatus* phytase. Support for these amendments is found in the specification at, for example, page 12, line 18.

New claims 25 and 35 recite that the unmodified phytase has the sequence of SEQ ID NO:3. Support for claims 25 and 33 is found in the specification at, for example, page 4, lines 8-9.

New claims 26-32 and 36-44 separately recite each one of the specific amino acid substitutions recited in amended claims 16 and 19, respectively. Support for claims 26-32 and 36-44 is found in originally filed claims 12, 15, 16 and 19, and in the specification at, for example, page 7, lines 10-15 and page 33, Table 3.


New claims 33 and 34 recite additional described amino acid substitutions. Support for claims 33 and 34 is found in the specification at, for example, page 33, Table 3.

 Claims <sup>25</sup>~~45~~ - 48 have been added. Support for these claims is found in the specification at, for example, page 3, lines 27-30 and page 4, lines 1-3.

It is submitted that no new matter has been introduced by the foregoing claims and amendments. Approval and entry of the claims and amendments respectfully is requested.

In view of the agreement reached with the Examiner at the Interview, favorable action on the merits, including entry of the amendments and allowance of all the claims, respectfully is requested. If the Examiner has any questions regarding this paper, please contact the undersigned attorney.

Respectfully submitted,

By:   
Gonzalo Merino, Ph.D.  
Registration No. 51,192  
BRYAN CAVE LLP  
1290 Avenue of the Americas  
New York, NY 10104-3300  
Phone: (212) 541-2000  
Fax: (212) 541-4630